

# FLETCHER'S

The Store That Pays No Rent

## New Fall Patterns IN QUAKER LACE CURTAINS 50c to \$15 a Pr.



In this display of the celebrated Quaker curtains we show more than 100 different new patterns. It will therefore be an easy matter to choose for any room in the house. Many different qualities are represented and each is the best of its kind. The assortment is so large and the scale of prices so broad that every purse is provided for. Better step in and look them over.

# FLETCHER'S

The Store That Pay No Rent

# Management



This bank is conservatively and progressively managed—our Officers and Directors being men of wide experience.

It is our pleasure to serve depositors and borrowers alike—courteously and well.

Bank with us:

## CLARKSBURG TRUST CO.

Capital \$400,000.00

CLARKSBURG, W. VA.

3rd and Pike Sts.—Opp. Postoffice

## DON'T DOPE THE BABY

GIVE HIM

# "SUSANNA"

Susanna contains no dope; is a corrective for summer complaint and prevents cholera infantum.

Sold with a guarantee by all Druggists.

## National Defense Problems VII--Lessons of the War--Explosives

By Frederic J. Haskin.

If the European war has produced new types of guns, new methods of fort construction and new machines for hurrying the death-dealing monsters from one place to another, it has also provided a vast experimental plan for the motive forces which lie behind the projectiles—the new explosives.

Uncle Sam himself maintains a number of proving grounds for new kinds of powder where the efficiency of each new explosive designed by the government chemists is demonstrated, but since August 1 last he has been depending in large part upon the greatest "proving ground" ever provided: the battlefields of the European war. Ever since the conflict commenced the United States government has been closely watching, through the medium of military experts and chemists well versed in the composition of different kinds of explosives, used abroad with a view to adopting the best of them for use in this country. In the event of war, the United States will not be ignorant of the latest words in gunpowder and its modern derivatives.

A Deadly Compound. One of the most important of these improvements on the invention credited to the Chinese is a compound of comparatively recent invention, known to the British military experts as "T. N. T." and to the Germans as "Trottyl." To chemists this substance masquerades under the name of "Trinitrotoluene," a title which is almost as deadly to the person who tries to pronounce it as would be a small quantity of the compound. The precise combination and method of preparation of this explosive differ slightly in different countries, but the resultant substance is practically the same. A considerable quantity of trottyl has already been manufactured in the United States and the war department is experimenting with it in an effort to discover whether it is sufficiently superior to the explosives formerly in use on this side of the Atlantic to warrant its adoption.

Because trottyl is the most efficient explosive yet designed for use in warfare, according to foreign experts, it must not be inferred that it is more powerful than any other explosive hitherto known. In point of fact, there are substances known to the chemist that explode with greater violence than is manifested by any compound used in the construction of military explosives or propellants.

The power of an explosive depends upon its capacity to produce a large volume of gas from a comparatively small amount of original solid matter. Judged by this standard, the most powerful explosive known is probably a salt of hydrazoic acid, the ammonia compound of which produces, according to the French chemist Berthelot, 1,148 cubic centimeters of gases for one gram weight of substance. No other known substance gives a corresponding change of volume, passing from the solid to the gaseous state, but there are chemical reasons why it is unwise to try to use this substance in lieu of gunpowder or in place of dynamite.

Too Sensitive. In the first place, these compounds of hydrazoic acid explode with extreme violence. If heated to a temperature slightly above the normal boiling point of water, they are therefore far too sensitive to be used for the practical purposes in which military explosives are put. Moreover, their extreme violence of action would be, to some extent, a disadvantage. It would prevent their use as propellants, since they would burst the gun barrels and if placed in torpedoes or mines, they would shatter their enclosing cases almost to the condition of powder on being discharged and on the whole would thus have a less destructive effect than would be produced by an explosive that burst the shell into relatively large pieces and by relatively slow combustion, extended the area of its destructive influence.

Such tendency to over-rapid explosion is a fault of picric acid and its derivatives, lyddite and melinite. In general, it may be said that the practical explosives now used in warfare are modified in such a way as to retard than to accelerate their rapidity of action when detonated. For ex-

ample, the British explosive, "cordite," which is used for small arms and ammunition alike, is modified in action by the simple expedient of manufacturing it into cords—whence its name—of smaller or larger size. The larger the cord, the slower its combustion. Thus it may be adapted to the requirements of a relatively slow burning propellant or of a quickly detonating explosive—although for practical purposes another explosive, lyddite, is usually substituted by the British in their mines and torpedoes.

A New Torpedo. In the field of torpedoes, however, the United States government is now experimenting with the invention of a young American, which naval experts claim is destined to revolutionize warfare on the sea quite as much as has the submarine. This invention consists of a torpedo of a novel size and shape capable of being guided or directed by means of a wireless station several miles distant. The torpedo is under the control of the marksman from the time it is launched and it may be made to turn to the right or to the left or even dive at the will of the wireless operator. The secret of the process whereby the torpedo is guided is being carefully guarded, for it is realized that if it proves itself, the possession of one such missile of death might possibly change the fate of nations.

One very striking lesson pointed by the European war to date is the necessity of turning back the clock of Mars as well as turning it forward. While the explosives which are being used are the latest products of the chemical factories, their containers and the manner in which they are applied are often primitive in the extreme. The trenches along the western battlefield during the last winter were often as close as fifty or seventy-five yards and it was therefore practically impossible to devise any gun or cannon which would fire the projectiles at such an angle that they would drop in the enemy's trenches such a short distance away. The Germans devised a gun known to the allied troops as the "Lazy Willie," which was capable of dropping shells some two hundred yards away, but it was not found to be effective at shorter ranges. Accordingly both sides had recourse to the ancient device of catapults, varied by the use of hand grenades, relays of warfare of a century or more ago.

Has a Fuse. The hand grenade is a small circular bomb, with a fuse attached. The fuse is lighted and the bomb thrown by hand into the opponents' trenches where, theoretically, it explodes with great damage. Owing to lack of uniformity in the length and burning qualities of the fuses, however, some of these grenades have exploded before they could be thrown, with effects similar to the bursting of a gun at the moment of firing.

There is also a report of an American soldier of fortune, a former collegiate baseball star, who was serving with the allies during the spring campaign when the hand grenade warfare was at its height. This young man's specialty was catching the grenades thrown by the enemy and throwing them back so quickly that they either exploded in mid-air without damage or else reached their original destination before bursting, thus creating considerable havoc among the very men who had started them on their journey of death. Spring training for baseball does not appear to be confined to this side of the Atlantic.

The tremendous advance in the science of warfare and the great strides that have been made in the manufacture of new explosives have given rise to a number of highly important reports of epoch-making substitutes for gunpowder, such as the French shell which was supposed to asphyxiate an entire company of the enemy when it burst or the German projectile which spread death-dealing vapors for acres around. The latter was probably the outgrowth of the "poisonous gas" method of the Germans, by which chlorine and other gases were introduced into the enemy's trenches by means of pipes laid under cover of darkness. This method was found to be particularly effective for paralyzing the enemy just before a charge was contemplated, but it can hardly be said to come under the head of explosives.

The Violet Ray. There remains the Philosopher's Stone of warfare, the super-explosive for which inventors have sought during the last thirty years—the so-called "Violet ray" or "Infra-ray" or "Fray" which will sound the knell of gunpowder and all kindred explosives as early as they disposed of the armor of the Crusaders. This ray transmitted through the ether like the wireless waves, will explode the ammunition or detonants of the enemy and destroy them with their own weapons. It will sink the greatest battleship by exploding the magazines and will dispose of the submarine peril by exploding the torpedoes. It will be irresistible; it will be revolutionary.

But the violet ray exists only in the confidence of inventors who claim that it will be perfected within a short time. One thing, however, is certain: the nation that controls the ray will hold in its hand the destinies of the world. Until the discovery is made, the United States will continue to depend upon the modern explosives.

Every home with a phone is a branch of Welch & Fullerton, Druggists.

Lower Prices  
Easier Terms  
Economy  
Furniture Store  
145-147 W. Main St.  
BELL PHONE 654-J  
We Buy, Sell and Exchange.



## Students

require A1 "tools," especially for class-room work. Your school supplies must be dependable. As insurance against any writing accidents or break downs, use

**Conklin's**  
Self-Filling  
Fountain Pen  
NON-LEAKABLE

the Particular Pen for Students. The original and easily the simplest of all self-fillers. Drop in and try it.

The James & Law Co.  
217 W. Main St.

# GOFF PLAZA

Another purchaser of Goff Plaza lots will start a new home in the above addition in a few days. Others are working on plans which shows the interest of buyers. There is no doubt this will be the resident section of Clarksburg, as every improvement has been put on Goff Plaza that can be thought of. The best lighting system, paved streets, Clarksburg water, sewerage, gas, electric, telephone and water systems all in the alleys. Every lot level and well drained, and prices that any one can pay. Lots from \$1,000, \$1,200, \$1,400, \$1,500, \$1,700, \$2,000, and up to \$5,500. Cement sidewalks and paved streets in front of every one of the lots. The terms are easy, 1-5 down, balance in 1, 2, 3 and 4 years, notes on or before with interest; and to anyone who will purchase now and pay for lot, Mr. Highland will furnish money to build on good long time; so come, buy and quit paying rent.

The Willison & Dennison Co.

REAL ESTATE BROKER  
General Insurance Agent  
Goff Bldg., Clarksburg

I Tis always desirable to have funds to your credit at the Bank.

In choosing a depository, consider the advantages of a checking account with the West Virginia Bank. Call and inspect our facilities.

## The West Virginia Bank

WALDO CORNER, CLARKSBURG  
GEORGE L. DUNCAN, President.  
R. A. FARLAND, Cashier  
L. D. GRIFFIN, Asst. Cashier

## Crown and Bridge Work \$5

Teeth  
Cleaned  
75c



Extracting  
25c

Plates \$8 Guaranteed 10 Yrs.

THE UNION DENTISTS  
Both Phones 320 W. Pike St.

Spencer's Silent Sentry will protect your boiler.

Have Your Plumbing  
"SPENCERIZED"

220 W. Pike, Opp. P. O.

EARLY SHOWING

—OF—

## New Fall Millinery

for immediate wear  
SATURDAY, AUG. 21.

M. E. Black-Krohme

"THE MILLINER"  
Gore Block Pike Street  
Room 11, Second Floor

## NOTICE TO CONTRACTORS.

Sealed proposals will be received by L. Wayman Ogden of Clarksburg, W. Va., Secretary of the Board of Education of Clark District, Harrison County, W. Va., until 10 o'clock a. m. August 26th, 1915 for the furnishing of labor and material for the alterations and additions of the Union Heights School Building, in accordance with drawings and specifications prepared by Holmboe & Lafferty, Architects, Empire Building, Clarksburg, W. Va. Copies of the drawings and specifications may be seen at the office of the secretary in the Clarksburg Trust Company's quarters or at the offices of the said architect.

Bidders must state in their proposal the time required to complete the building. As a guarantee that contract and bond will be entered into by the successful bidder, each bid must be accompanied by a certified check for One Hundred Dollars (\$100.00). A legal and satisfactory bond will be required of the successful bidder, guaranteeing the faithful performance of the contract.

The Board reserves the right to reject any or all bids. By order of the Board of Education. (Signed) A. F. STEWART, President. L. WAYMAN OGDEN, Secretary. HOLMBOE & LAFFERTY, Architects.

Susanna for children—for fretful children.—Advertisement.

## FAIR AT NIGHT.

There will be night features at the Central West Virginia Fair to be held August 1, September 1, 2 and 3 at Clarksburg, with carnival and other attractions, and special electric and gas lighting systems have been installed for the purpose.



## "Has Your Baby Colic?"

You can cure it in ten minutes with DR. FAHRNEY'S TEETHING SYRUP. Which makes happy babies. A sure remedy for all infant complaints. Prevents Cholera Infantum. Cures bowel troubles. Babies like it because it is pleasant to take. Mothers should not be without it. Can be given to babies one day old. 25 cents, at all druggists. Trial bottle free if you mention the name. Made only by DR. D. FAHRNEY & SON, HAGERSTOWN, Md.

## R. T. Lowndes Dept. Store.

Established 1831

Established 1831

# Home Grown

Peaches, Green Gage  
Plums, Tomatoes,  
Sweet Corn and  
Etc.

PHONE YOUR ORDER  
We Will Do Our Best to  
Please You